Consumer Confidence Report

Calendar Year: January 1, 2016 to December 31, 2016

Public Water System (PWS): City of Cottonwood

PWS: AZ0413-025 (Cottonwood-CW1)

" La información contendía en este informe tiene información importante con respecto a la calidad del aqua proporcionada por la utilidad municipal del aqua de la ciudad de Cottonwood. Si usted quisiera recibir una copia de este informe en español, por favor llame 928-634-0186 para solicitar una copia"

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. The language contained in this report is mandated by Arizona Department of Environmental Quality.

General Information About Drinking Water

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and microbiological contaminants call the EPA *Safe Drinking Water Hotline* at 1-800-426-4791.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- ***Microbial contaminants***, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- ***Inorganic contaminants***, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- ***Pesticides and herbicides that*** may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- ***Organic chemical contaminants***, including synthetic volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also
  may come from gas stations, urban storm water runoff, and septic systems.
- ***Radioactive contaminants***, that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Arizona Department of Environmental Quality prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Where Does My Water Come From?

The City of Cottonwood's water service area for System 13-025 includes all areas in the City of Cottonwood. Within this service area boundary, there are 8 wells and 5 storage tanks (combined total of 2,150,000 gallons). The City pumps all of its water from deep groundwater wells and uses chlorination for disinfection.
Well Site 1/2 (EPDS010), Well Site 4/7 (EPDS007), Well Site 5 (EPDS005), Well Site 8/9 (EPDS008), Well Site 12 (EPDS011),

Source Water Assessments on file with the Arizona Department of Environmental Quality are available for public review. If a Source Water Assessment is available, you may obtain a copy of it by contacting the Arizona Source Water Coordinator at (602) 771-4641.

Source Water Assessment (Low Risk)
Based on the information currently available on the hydrogeologic settings and the adjacent land uses that are in the specified proximity of the drinking water source (s) of this public water system, the Arizona Department of Environmental Quality (ADEQ) has given a **low risk** designation for the degree to which this public water system drinking water source(s) are protected. A low risk designation indicates that most source water protection measures are either already implemented, or the hydrogeology is such that the source water protection measures will have little impact on protection.

Please contact Mike Traynor – Utilities Operations Manager at (928) 634-0186 ext. 3306 to learn more about what you can do to help protect your drinking water sources, any questions about the annual drinking water quality report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Terms and Abbreviations:

To help you understand the terms and abbreviations used in this report, we have provided the following definitions:

AL = Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements.
DSMRT= Distribution Maximum Residence Time- a location that provides water to customers, where the water has been in the system the longest relative to the EPDS.
EPDS= Entry Point Into Distribution System, the point at which water is discharged into the distribution system from a well, storage tank, pressure tank, or water treatment plant.
MCL = Maximum Contaminant Level - The "Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water.
MCLG = Maximum Contaminant Level Goal - The "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health.
MRDL = Maximum Residual Disinfectant Level.
MRDLG = Maximum Residual Disinfectant Level Goal.
MRL= Minimum Reporting Level.
ND= Non-Detected contaminant
PCi/L = Picocuries per liter - picocuries per liter is a measure of the radioactivity in water.
PPM = Parts per million or Milligrams per liter (mg/L).
PPB = Parts per billion or Micrograms per liter (µg/L).
PPT = Parts per trillion or Nanograms per liter.
PPQ = Parts per quadrillion or Picograms per liter.

ppm x 1000 = ppb
ppb x 1000 = ppt
ppt x 1000 = ppq

RAA= Running Annual Average, an average of monitoring results for the previous 12 calendar months.

Water Quality Data

We routinely monitor for contaminants in your drinking water according to Federal and State laws. The State of Arizona requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Some of our data, though representative, may be more than one year old.
We did not include the results for Total Coliform Bacteria, E.Coli, Synthetic Organic Chemical (SOC) including Pesticides, Volatile Organic Chemicals (VOC), Cadmium, Mercury, Selenium, Antimony, Beryllium, Cyanide, Nickel, Thallium , Haloacetic Acids (HAA5) and Aroclor (PCB Screening test) in this report, as the results were **non-detect** (ND). If you have questions on a particular contaminant, please contact Mike Traynor –Utilities Operations Manager at (928) 634-0186 ext. 3306.

These tables show the results of our monitoring for the period of January 1 to December 31, 2016 unless otherwise noted.

Disinfectants	**Violation Y or N**	***Running Annual Average (RAA)***	***Range of All Samples (L-H)***	***MCL***	***MCLG***	***Sample Month & Year***	***Likely Source of Contamination***
Chlorine (ppm	*N*	*0.60*	*0.41-0.89*	*MRDL = 4*	*MRDLG = 4*	*Quarterly 2016*	*Water additive used to control microbes*

Disinfection By-Products	**Violation *Y or N***	***Running Annual Average (RAA)***	***Range of All Samples (L-H)***	***MCL***	***MCLG***	***Sample Month & Year***	***Likely Source of Contamination***
Total Trihalomethanes (ppb) (TTHM)	*N*	*2.3*	*1.8-2.3*	*80*	*n/a*	*Aug. 2016*	*Byproduct of drinking water disinfection*
Lead & Copper	**Violation *Y or N***	***90th Percentile AND Number of Samples Over the AL***	***Range of All Samples (L-H)***	***AL***	***ALG***	***Sample Month & Year***	***Likely Source of Contamination***
Copper (ppm)	*N*	*90th Percentile = 0.265 and 0*	*0.01- 0.398*	*AL = 1.3*	*ALG = 1.3*	*Sept. 2015*	*Corrosion of household plumbing systems; erosion of natural deposits*
Lead (ppb)	*N*	*90th Percentile = 3.1 and 0*	*ND – 4.3*	*AL = 15*	*0*	*Sept. 2015*	*Corrosion of household plumbing systems; erosion of natural deposits*

Radionuclides	**Violation *Y or N***	***Highest Level Detected***	***Range of All Samples (L-H)***	***MCL***	***MCLG***	***Sample Year***	***Likely Source of Contamination***
Gross alpha excluding radon and uranium (pCi/L)	*N*	*2.3*	*0.7 – 2.3*	*15*	*0*	*2015*	*Erosion of natural deposits*
Inorganic Chemicals (IOC)	**Violation *Y or N***	***Highest Level Detected***	***Range of All Samples (L-H)***	***MCL***	***MCLG***	***Sample Year***	***Likely Source of Contamination***
Arsenic (ppb)	*N*	*7.8*	*ND-7.8*	*10*	*0*	*Quarterly 2016*	*Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes*
Barium (ppm)	*N*	*0.60*	*0.22-0.60*	*2*	*2*	*June 2015*	*Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits*
Chromium (ppb)	*N*	*11*	*ND-11*	*100*	*100*	*June 2015*	*Discharge from steel and pulp mills; Erosion of natural deposits*
Fluoride (ppm)	*N*	*0.38*	*0.14-0.38*	*4*	*4*	*2015*	*Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilize rand aluminum factories.*
Nitrate (ppm)	*N*	*0.55*	*0.32-0.55*	*10*	*10*	*April 2016*	*Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits*

*Unregulated Secondary Contaminants**	Violation *Y or N*	*Highest Level Detected*	*Range of All Samples (L-H)*	*MCL*	*MCLG*	*Sample Year*	Likely Source of Contamination
Sodium (ppm)	*N/A*	*45*	*23-45*	*N/A*	*N/A*	*2015*	*Erosion of natural deposits*

*Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic or aesthetic effects in drinking water. EPA recommends these standards but does not require water systems to comply.

Health Effects Information About the Above Tables

If **arsenic** is less than the MCL, your drinking water meets EPA's standards. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Infants and young children are typically more vulnerable to **lead** in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the EPA *Safe Drinking Water Hotline* at 1-800-426-4791

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods-of-time because of rainfall or agricultural activity. If you are caring infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care providers.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Availability of Monitoring Data for Unregulated Contaminants (UCMR 3) for 13-025

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by USEPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that this data is available. If you are interested in examining the results, please contact Mike Traynor at (928) 634-0186 ext. 3306 or via email at mtraynor@cottonwoodaz.gov

This notice is being sent to you by City of Cottonwood CW1. State Water System ID#: 13-025
Date distributed: July 2017

*Unregulated Contaminants (UCMR3)**	Violation *Y or N*	*Highest Level Detected*	*Range of All Samples (L-H)*	*MRL*	*Reference Concentration (ug/L)*	*Sample Month & Year*
Chromium (ug/L)	*N/A*	*11*	*0.7-11*	*0.2*	*100*	*June 2014*
Molybdenum (ug/L)	*N/A*	*1.9*	*ND-1.9*	*1*	*40*	*June 2014*
Strontium (ug/L)	*N/A*	*510*	*410-510*	*0.3*	*4000*	*June 2014*
Vanadium (ug/L)	*N/A*	*12*	*2-12*	*0.2*	*21*	*June 2014*

Chromium, Hexavalent (ug/L)	*N/A*	*12*	*0.8-12*	*0.03*	*N/A*	*July 2014*
Chlorate (ug/L)	*N/A*	*130*	*70-130*	*20*	*210*	*June 2014*

***** Please refer to the UCMR3 Data Summary (available at http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/data.cfm#ucmr2013). The Data Summary includes health-based "reference concentrations" (along with explanatory discussion) for many of the UCMR3 contaminants. The reference concentrations were developed to provide context around the detection of particular UCMR contaminants. Samples were taken both as EPDS and DSMRT locations.

Violations:

Type/Description	Compliance Period	Corrective Actions taken by the City of Cottonwood
Report Sample Results/Fail Monitor RTCR	12/01/2016 – 12/31/2016	The microbiological samples were taken during the month of December 2016 and all samples were negative. However, the reports were sent to the regulatory agency outside of the required compliance period.